SNOWSHOE SPRINGS

2020 Consumer Confidence Report (CCR), Snowshoe Springs Supplement

Snowshoe Springs Association (SSA) purchases treated water from the Calaveras County Water District (CCWD) for subsequent distribution to SSA property owners. CCWD conducts extensive testing of our water, the results of which are contained under the Ebbetts Pass heading in the CCWD CCR which accompanies this supplement. In addition to the testing by CCWD, SSA performs additional testing of the water to monitor the quality after it reaches our system and is exposed the tanks and distribution piping.

At the beginning of each month, SSA takes two water samples which are sent to Alpha Analytical Laboratories in Elk Grove. There, the samples are analyzed for the presence of Coliform bacteria (Total Coliform). If any is detected, the water is then tested for Fecal Coliform/E. Coli. For this year, as shown in Table 1, there was a single instance of a positive coliform sample during the month of November. The initial sample tested positive for coliform as did the repeat sample collected immediately after the positive result. After further investigation it was discovered that there was debris in the newly constructed sample line. After repairing the line and removing the debris, five subsequent samples were collected which all showed negative total coliform results.

While collecting the bacteriological samples, SSA also measures chlorine residual monthly. Chlorine disinfection is done by CCWD. A minimum residual of approximately .5 mg/L must be maintained in our system and the monthly average residual cannot exceed the Maximum Residual Disinfection Level (MRDL) of 4.0 mg/L. Typically the state standard for minimum chlorine residual in a system is 0.2 mg/L. Due to the fact that SSA is a smaller system and does not have any type of continuous chlorine analyzers, the state has required us to maintain a higher residual chlorine concentration. During 2020 the system maintained an adequate chlorine residual for each sample.

The SSA distribution system is all plastic (except for some fittings in control locations). Therefore, any lead in the water is usually introduced by certain types of household plumbing. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your house may be higher than at other houses in the sub-division as a result of materials used in your plumbing. If you are concerned about elevated lead levels in your water, you may wish to have your water tested, and flush your tap for 30 seconds to 2 minutes before using tap water. SSA has informational pamphlets about lead in drinking water, available on request. After our 2019 annual inspection from the Department of Drinking Water, the SSA was allowed to resume triennial lead and copper sampling. Due to the change in frequency of sampling, we were not required to collect lead and copper samples in 2020 which is why there is no Table 2 in the provided data as there has been in previous years. The next round of lead and copper sampling will occur in 2021.

In addition to the aforementioned testing, routine water quality tests are performed on the water entering the system as well as the middle of the SSA distribution system. These tests, otherwise referred to as “Water Quality Parameters” are shown in Table 3. The parameters sampled for in these tests help identify the nature of the water in our system to leach lead into your drinking water. The Langlier Index value is derived from an equation that evaluates water quality data. A negative Langlier Index value indicates that the water is corrosive. The more negative the value, the more corrosive the water is determined to be.

Table 4 shows the results of testing for certain disinfection by-products (DBP's). The DBP’s that are required to be analyzed for are HaloAcetic Acids (HAA5) and Total Tri-HaloMethane (TTHM). Disinfection by-products are formed when organic material comes into contact with chlorine. Chlorine is added to drinking water to disinfect it and provide an additional residual chlorine concentration to act as a protectant if a minor contamination was to enter the system. Samples for the DBP measurements are purposely taken at the bottom of Lower Hangtree. The reason for this is that DBP’s increase the longer the organics in the water are in contact with chlorine which means that the best way to measure DBP’s in the system, is to analyze the water at the furthest point in the system.

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Sample analysis data for 2020

Table 1
Monthly Chlorine Residual and Coliform Monitoring Results

Date Sampled	Black Bart Cl_2 mg/L	Indian Rock Cl_2 mg/L	Monthly Cl_2 mg/L (avg)	Total Number of Coliform Positives	Total Number of Fecal/E. Coli Positives
1/6/2020	1.24	1.19	1.22	0	0
2/3/2020	1.06	1.05	1.06	0	0
3/2/2020	1.01	1.10	1.06	0	0
4/9/2020	1.01	0.97	0.99	0	0
5/3/2020	0.98	1.06	1.02	0	0
6/4/2020	1.16	0.88	1.02	0	0
7/6/2020	0.94	1.07	1.01	0	0
8/9/2020	0.98	0.93	0.96	0	0
9/7/2020	1.41	1.34	1.38	0	0
10/4/2020	1.09	1.19	1.14	0	0
11/20/2020	0.82	0.76	0.79	1	0
12/8/2020	1.08	0.70	0.89	0	0

Min	0.82	0.70	**0.79**
Max	1.41	1.34	**1.38**
Avg	1.07	1.02	**1.04**

Must be greater than 0.20 mg/L
Must be less than 4.0 mg/L

Sample analysis data for 2020

Table 3
Annual Water Quality Parameter Results

Sample Location: Tank 1

Date	Parameter	Test Name	Results	Units	% change from 2018
8/9/2020	Alk	Total Alkalinity	12	mg/L	-8%
8/9/2020	Ca	Calcium, Titrimetric	2.8	mg/L	-13%
8/9/2020	Corr	Corrosivity, Langeli	-2.80	LSI	8%
8/9/2020	PbI	Lead by ICP/MS	ND	ug/L	-
8/9/2020	TDS	Total Dissolved Solids	130	mg/L	420%
8/9/2020	TPOL	Total Phosphorous	ND	mg/L	-
8/9/2020	pH	pH, Lab	7.29		0%

Sample Location: Indian Rock

Date	Parameter	Test Name	Results	Units	% change from 2018
8/9/2020	Alk	Total Alkalinity	12	mg/L	-8%
8/9/2020	Ca	Calcium, Titrimetric	2.7	mg/L	-10%
8/9/2020	Corr	Corrosivity, Langeli	-2.84	LSI	3%
8/9/2020	PbI	Lead by ICP/MS	ND	ug/L	-
8/9/2020	TDS	Total Dissolved Solids	81	mg/L	212%
8/9/2020	TPOL	Total Phosphorous	ND	mg/L	-
8/9/2020	pH	pH, Lab	7.25		0%

Table 4
Annual Disinfection By-Products Results
Location/Address Lot 360

Parameter	MP 1	MP 2	MP 3	MP 4
	1/7/2020	4/9/2020	7/6/2020	10/4/2020
TTHM	24.00	35.00	39.00	44.00
HAA5	39.00	49.00	**64.00**	36.00

MP = monitoring period
MCL = Maximum Contaminant Level (allowed by the state of California)
The MCL for THM's is 80 ug/L or ppb
The MCL for HAA5's is 60 ug/L or ppb